a number of electromechanical components of an electromechanical transducer, physically attached to said main structural member,

said flexible printed circuit board comprising electrical connections to said electromechanical components of said electromechanical transducer.

--29. (new) The transducer microsystem according to claim 28, wherein said electromechanical transducer operates by at least one physical effect selected from the list consisting of a piezoelectric, an electrostrictive, and a shape memory.

B1 cont.

--30. (new) The transducer microsystem according to claim 28, wherein said flexible printed circuit board (10) has an elastic deformation, and said flexible printed circuit board (10) forms a general support for internal (30, 32) and external forces.

--31. (new) The transducer microsystem according to claim 28, wherein said flexible printed circuit board (10) is elastically deformed to apply an elastic contact force (30, 32) to at least one of said components (22) of said electromechanical transducer, forming a mechanical contact.

--32. (new) The transducer microsystem according to claim 28, further comprising electrical components (24) or optical components attached to said flexible printed circuit

board (10).

--33. (new) The transducer microsystem according to claim 32, wherein said flexible printed circuit board (10) is elastically deformed to apply an elastic contact force (30, 32) to at least one of said electrical or optical components (24), forming an electrical contact.

B' Cont

--34. (new) The transducer microsystem according to claim 30, wherein said elastic deformation comprises an elastic compression or tension substantially perpendicular to the surface of said flexible printed circuit board (10).

--35. (new) The transducer microsystem according to claim 34, wherein said flexible printed circuit board (10) is arranged between a component (22) of said electromechanical transducer and at least one of a rigid support means (36), an electrical or optical component (24), and another of said components (22) of said electromechanical transducer,

wherein the intrinsic material elasticity of said flexible printed circuit board (10) provides an elastic contact force.

--36. (new) The transducer microsystem according to claim 30, wherein said elastic deformation comprises an elastic deflection of at least a portion (19) of said flexible printed circuit board (10).

--37. (new) The transducer microsystem according to claim 36, wherein said elastic deflection is a bending or a folding.

--38. (new) The transducer microsystem according to claim 38, wherein

B1 cont.

a first component (22) of said electromechanical transducer is positioned in the path of said elastic deflection, and

the resilience of said deflected flexible printed circuit board portion (19) applies a spring force on said first component (22) of said electromechanical transducer.

--39. (new) The transducer microsystem according to claim 28, wherein said flexible printed circuit board (10) constitutes a casing of said transducer microsystem.

--40. (new) The transducer microsystem according to claim 28, wherein said flexible printed circuit board (10) comprises a polyimide material.

--41. (new) The transducer microsystem according to claim 28, wherein said flexible printed circuit board (10) is provided with geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) which are engagable to other ones of said geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) and to other members of said transducer microsystem.

--42. (new) The transducer microsystem according to claim 41, wherein said geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) comprise holes, slits, pits, ridges, valleys or bumps.

--43. (new) The transducer microsystem according to claim 41, wherein said geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) comprise adjustable locking structures.

B1 cont

--44. (new) A microelectromechanical motor, comprising a transducer microsystem, being defined as a transducer system in which the size of any active transducer components is in the order of centimeters or less, said transducer microsystem comprising:

a main structural member, constituting a dominating part of a supporting framework of entire said transducer microsystem;

said main structural member being a flexible printed circuit board; and

a number of electromechanical components of electromechanical transducer, physically attached to said main structural member;

said flexible printed circuit board comprising electrical connections to said electromechanical components of said electromechanical transducer.

--45. (new) A microelectromechanical motor according to claim 44, wherein said microelectromechanical motor operates according to one of the following motion principles:

inertia based, resonant effect and non-resonant repetition of small steps.

--46. (new) A method of assembling a transducer microsystem, whereby transducer microsystem being defined as a transducer system in which the size of any active transducer components is in the order of centimeters or less, said assembling method comprising the steps of:

B1 cont.

providing a main structural member, constituting a dominating part of a supporting framework of entire said transducer microsystem;

using a flexible printed circuit board as said main structural member;

physically attaching a number of electromechanical components of an electromechanical transducer to said main structural member; and

electrically connecting said electromechanical components of said electromechanical transducer to said flexible printed circuit board.

--47. (new) The method of assembling a transducer microsystem according to claim 46, comprising the further step of applying an elastic force to at least one of said components (22)

of said electromechanical transducer by reshaping at least a portion of said flexible printed circuit board (10).

B1 Cont.

--48. (new) The method of assembling a transducer microsystem according to claim 46, comprising the further step of attaching electrical components (24) or optical components to said flexible printed circuit board (10).

--49. (new) The method of assembling a transducer microsystem according to claim 46, wherein at least the major part of any steps of attaching components (22, 24, 26) to said flexible printed circuit are performed on a substantially flat flexible printed circuit board (10).

--50. (new) The method of assembling a transducer microsystem according to claim 46, comprising the further step of providing said flexible printed circuit board (10) with geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) engagable to other ones of said geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) and to other members of said transducer microsystem.

--51. (new) The method of assembling a transducer microsystem according to claim 50, comprising the further step of locking said flexible printed circuit board (10) by said geometrical structures (16, 18, 20; 32, 33, 34; 40, 42; 44, 46, 48) to apply an elastic force to at least a first of said

components (22) of said electromechanical transducer.

--52. (new) The method of assembling a transducer microsystem according to claim 51, wherein adjusting said flexible printed circuit board by locking to apply an elastic force compensates for thermal, dimensional variations, adjusts mechanical resonances of said first component (22) of said electromechanical transducer, or adjusts the position of said first component (22) of said electromechanical transducer.

--53. (new) The method of assembling a transducer microsystem according to claim 47, wherein said step of reshaping comprises at least one of the following steps:

elastically folding said flexible printed circuit (10);

elastically bending said flexible printed circuit (10); and

elastically tensing or compressing said flexible printed circuit (10) substantially perpendicular to its surface.

--54. (new) The method of assembling a transducer microsystem according to claim 53, wherein the step of positioning a component (22) of said electromechanical transducer in the path of said elastic reshaping allows the resilience of said reshaped flexible printed circuit board portion (19) to apply a spring force on said electromechanical transducer component (22).--